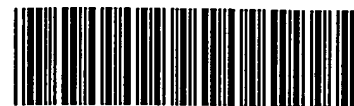


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 09/910,2080
Source: 1FW/6
Date Processed by STIC: 3/29/07

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/09/910,208D

TIME: 11:13:10

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\03292007\I910208D.raw

```

3 <110> APPLICANT: Hitomi, Jiro
4   Yamamura, Tokujiro
5   Kimura, Tatsuji
6   Yamaguchi, Ken
8 <120> TITLE OF INVENTION: Novel Calcium-Binding Proteins
10 <130> FILE REFERENCE: MM4454
12 <140> CURRENT APPLICATION NUMBER: 09/910,208D
13 <141> CURRENT FILING DATE: 2001-07-20
15 <160> NUMBER OF SEQ ID NOS: 20
17 <170> SOFTWARE: PatentIn version 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 429
21 <212> TYPE: DNA
22 <213> ORGANISM: Bovine calcium binding protein
25 <220> FEATURE:
26 <221> NAME/KEY: exon
27 <222> LOCATION: (48)..(323)
28 <223> OTHER INFORMATION: Amino acid sequence of calcium-binding protein from bovine
29   amniotic fluid
31 <400> SEQUENCE: 1
32 ctggcattcc acacttctgt gcagaggggt gaacgtagtt tggtaaa atg act aag      56
33                                     Met Thr Lys
34                                     1
36 ctg gaa gat cac ctg gag gga atc atc aac atc ttc cac cag tac tcc      104
37 Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr Ser
38   5          10          15
40 gtt cgg gtg ggg cat ttc gac acc ctc aac aag cgt gag ctg aag cag      152
41 Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys Gln
42 20          25          30          35
44 ctg atc aca aag gaa ctt ccc aaa acc ctc cag aac acc aaa gat caa      200
45 Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln
46          40          45          50
48 cct acc att gac aaa ata ttc caa gac ctg gat gcc gat aaa gac gga.      248
49 Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly
50          55          60          65
52 gcc gtc agc ttt gag gaa ttc gta gtc ctg gtg tcc agg gtg ctg aaa      296
53 Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg Val Leu Lys
54          70          75          80
56 aca gcc cac ata gat atc cac aaa gag taggaagctc tttccagcaa      343
57 Thr Ala His Ile Asp Ile His Lys Glu
58   85          90
60 tgtccccaag aagacttacc cttctcctcc ctgaggctgc cttacccgag ggaagagaga      403
62 attaataaac gtactttggc aaagtt      429

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RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/09/910,208D

TIME: 11:13:10

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\03292007\I910208D.raw

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65 <210> SEQ ID NO: 2
66 <211> LENGTH: 50
67 <212> TYPE: PRT
68 <213> ORGANISM: Bos taurus
70 <400> SEQUENCE: 2
72 Thr Lys Leu Glu His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr
73 1      5      10      15
76 Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys
77      20      25      30
80 Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp
81      35      40      45
84 Gln Pro
85      50
88 <210> SEQ ID NO: 3
89 <211> LENGTH: 8
90 <212> TYPE: PRT
91 <213> ORGANISM: Bos taurus
93 <400> SEQUENCE: 3
95 Ile Phe Gln Asp Leu Asp Ala Asp
96 1      5
99 <210> SEQ ID NO: 4
100 <211> LENGTH: 12
101 <212> TYPE: PRT
102 <213> ORGANISM: Bos taurus
104 <400> SEQUENCE: 4
106 Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu
107 1      5      10
110 <210> SEQ ID NO: 5
111 <211> LENGTH: 9
112 <212> TYPE: PRT
113 <213> ORGANISM: Bos taurus
115 <400> SEQUENCE: 5
117 Thr Ala His Ile Asp Ile His Lys Glu
118 1      5
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 31
123 <212> TYPE: PRT
124 <213> ORGANISM: Bos taurus
126 <400> SEQUENCE: 6
128 Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln Pro Thr Ile Asp Lys
129 1      5      10      15
132 Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly Ala Val Ser Phe
133      20      25      30
136 <210> SEQ ID NO: 7
137 <211> LENGTH: 20
138 <212> TYPE: PRT
139 <213> ORGANISM: Bos taurus
141 <400> SEQUENCE: 7
143 Glu Phe Val Val Leu Val Ser Arg Val Leu Lys Arg Ala His Ile Asp

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RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/09/910,208D

TIME: 11:13:10

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\03292007\I910208D.raw

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144 1          5          10          15
147 Ile His Lys Glu
148          20
151 <210> SEQ ID NO: 8
152 <211> LENGTH: 20
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial
156 <220> FEATURE:
157 <223> OTHER INFORMATION: sense primer
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (3)..(3)
163 <223> OTHER INFORMATION: n is a, c, g or t
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (15)..(15)
168 <223> OTHER INFORMATION: n is a, c, g, or t
170 <400> SEQUENCE: 8
W--> 171 ttngargayc ayytngargg                20
174 <210> SEQ ID NO: 9
175 <211> LENGTH: 20
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial
179 <220> FEATURE:
180 <223> OTHER INFORMATION: antisense primer
183 <220> FEATURE:
184 <221> NAME/KEY: misc_feature
185 <222> LOCATION: (18)..(18)
186 <223> OTHER INFORMATION: n is a, c, g, or t
188 <400> SEQUENCE: 9
W--> 189 ttrtgdatrt cdatrtgngc                20
192 <210> SEQ ID NO: 10
193 <211> LENGTH: 23
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial
197 <220> FEATURE:
198 <223> OTHER INFORMATION: forward primer
200 <400> SEQUENCE: 10
201 ggtggcacga ctctgggagc ccg                23
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 24
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial
209 <220> FEATURE:
210 <223> OTHER INFORMATION: reverse primer
212 <400> SEQUENCE: 11
213 ttgacaccag accaactggt aatg                24
216 <210> SEQ ID NO: 12
217 <211> LENGTH: 440

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RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/09/910,208D

TIME: 11:13:10

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\03292007\I910208D.raw

218 <212> TYPE: DNA
 219 <213> ORGANISM: human calcium-binding protein
 222 <220> FEATURE:
 223 <221> NAME/KEY: exon
 224 <222> LOCATION: (22)..(297)
 225 <223> OTHER INFORMATION: Deduced amino acid sequence for human calcium-binding
 protein
 227 <400> SEQUENCE: 12
 228 gggttaacatt aggctgggaa g atg aca aaa ctt gaa gag cat ctg gag gga 51
 229 Met Thr Lys Leu Glu Glu His Leu Glu Gly
 230 1 5 10
 232 att gtc aat atc ttc cac caa tac tca gtt cgg aag ggg cat ttt gac 99
 233 Ile Val Asn Ile Phe His Gln Tyr Ser Val Arg Lys Gly His Phe Asp
 234 15 20 25
 236 acc ctc tct aag ggt gag ctg aag cag ctg ctt aca aag gag ctt gca 147
 237 Thr Leu Ser Lys Gly Glu Leu Lys Gln Leu Leu Thr Lys Glu Leu Ala
 238 30 35 40
 240 aac acc atc aag aat atc aaa gat aaa gct gtc att gat gaa ata ttc 195
 241 Asn Thr Ile Lys Asn Ile Lys Asp Lys Ala Val Ile Asp Glu Ile Phe
 242 45 50 55
 244 caa ggc ctg gat gct aat caa gat gaa cag gtc gac ttt caa gaa ttc 243
 245 Gln Gly Leu Asp Ala Asn Gln Asp Glu Gln Val Asp Phe Gln Glu Phe
 246 60 65 70
 248 ata tcc ctg gta gcc att gcg ctg aag gct gcc cat tac cac acc cac 291
 249 Ile Ser Leu Val Ala Ile Ala Leu Lys Ala Ala His Tyr His Thr His
 250 75 80 85 90
 252 aaa gag taggtagctc tctgaagctt tttaccacagc aatgtcctca atgaggggtct 347
 253 Lys Glu
 256 tttctttccc tcaccaaaac ccagccttgc ccgtggggag taagagttaa taaacacact 407
 258 cacgaaaagt taaaaaaaaa aaaaaaaaaat tct 440
 261 <210> SEQ ID NO: 13
 262 <211> LENGTH: 20
 263 <212> TYPE: DNA
 264 <213> ORGANISM: Artificial
 266 <220> FEATURE:
 267 <223> OTHER INFORMATION: sense primer
 269 <400> SEQUENCE: 13
 270 actatcaaca tcttccacca 20
 273 <210> SEQ ID NO: 14
 274 <211> LENGTH: 20
 275 <212> TYPE: DNA
 276 <213> ORGANISM: artificial
 278 <220> FEATURE:
 279 <223> OTHER INFORMATION: antisense primer
 281 <400> SEQUENCE: 14
 282 tctttatcgg catccaggtc 20
 285 <210> SEQ ID NO: 15
 286 <211> LENGTH: 15
 287 <212> TYPE: DNA
 288 <213> ORGANISM: Artificial

RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/09/910,208D

TIME: 11:13:10

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\03292007\I910208D.raw

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290 <220> FEATURE:
291 <223> OTHER INFORMATION: primer PMN.HP7S 1-15
293 <400> SEQUENCE: 15
294 tactcagttc ggaag
297 <210> SEQ ID NO: 16
298 <211> LENGTH: 15
299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial
302 <220> FEATURE:
303 <223> OTHER INFORMATION: primer PMN.HP7A 126-112
305 <400> SEQUENCE: 16
306 ttggaatatt tcatc
309 <210> SEQ ID NO: 17
310 <211> LENGTH: 20
311 <212> TYPE: DNA
312 <213> ORGANISM: Artificial
314 <220> FEATURE:
315 <223> OTHER INFORMATION: primer HP7S 7-26
317 <400> SEQUENCE: 17
318 acattaggct gggaagatga
321 <210> SEQ ID NO: 18
322 <211> LENGTH: 20
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial
326 <220> FEATURE:
327 <223> OTHER INFORMATION: primer HP7A 336-317
329 <400> SEQUENCE: 18
330 ggacattgct gggtaaaaag
333 <210> SEQ ID NO: 19
334 <211> LENGTH: 92
335 <212> TYPE: PRT
336 <213> ORGANISM: Bovine calcium binding protein
339 <220> FEATURE:
340 <221> NAME/KEY: misc_feature
341 <222> LOCATION: (1)..(92)
342 <223> OTHER INFORMATION: Amino acid sequence of SEQ ID No. 1
344 <400> SEQUENCE: 19
346 Met Thr Lys Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His
347 1 5 10 15
350 Glu Tyr Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu
351 20 25 30
354 Leu Lys Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr
355 35 40 45
358 Lys Asp Gln Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp
359 50 55 60
362 Lys Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg
363 65 70 75 80
366 Val Leu Lys Thr Ala His Ile Asp Ile His Lys Glu
367 85 90

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/910,208D

DATE: 03/29/2007
TIME: 11:13:11

Input Set : F:\MM4454.ST25.txt
Output Set: N:\CRF4\03292007\I910208D.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; N Pos. 3,15

Seq#:9; N Pos. 18

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:8,9,10,11,13,14,15,16,17,18

VERIFICATION SUMMARY

DATE: 03/29/2007

PATENT APPLICATION: US/09/910,208D

TIME: 11:13:11

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\03292007\I910208D.raw

L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0

L:189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0